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FILE COVERS 1907 - 9 Sep 2003 VOL 139 ISS 11  
FILE LAST UPDATED: 8 Sep 2003 (20030908/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

```
=> S (FIBER OR FIBRE) (L) (MOLDED OR MOULDED) (L) (PART OR ARTICLE)
    450150 FIBER
    480516 FIBERS
    622037 FIBER
        (FIBER OR FIBERS)
    2668 FIBRE
    1789 FIBRES
    4295 FIBRE
        (FIBRE OR FIBRES)
    118097 MOLDED
        294 MOULDED
    823116 PART
    626329 PARTS
    1316388 PART
        (PART OR PARTS)
    82033 ARTICLE
    69198 ARTICLES
    139233 ARTICLE
        (ARTICLE OR ARTICLES)
L1      7907 (FIBER OR FIBRE) (L) (MOLDED OR MOULDED) (L) (PART OR ARTICLE)

=> S POLYAMIDE AND CARBON
    113007 POLYAMIDE
    88413 POLYAMIDES
    144218 POLYAMIDE
        (POLYAMIDE OR POLYAMIDES)
    1015291 CARBON
    22638 CARBONS
    1023546 CARBON
        (CARBON OR CARBONS)
L2      11136 POLYAMIDE AND CARBON

=> S POLYAMIDE (L) CARBON
    113007 POLYAMIDE
    88413 POLYAMIDES
    144218 POLYAMIDE
        (POLYAMIDE OR POLYAMIDES)
    1015291 CARBON
    22638 CARBONS
    1023546 CARBON
        (CARBON OR CARBONS)
```

L3 4456 POLYAMIDE (L) CARBON

=> S WOVEN AND FABRIC

19095 WOVEN

96 WOSENS

19168 WOVEN

(WOVEN OR WOSENS)

89512 FABRIC

81132 FABRICS

123770 FABRIC

(FABRIC OR FABRICS)

L4 12923 WOVEN AND FABRIC

=> S WOVEN (L) FABRIC

19095 WOVEN

96 WOSENS

19168 WOVEN

(WOVEN OR WOSENS)

89512 FABRIC

81132 FABRICS

123770 FABRIC

(FABRIC OR FABRICS)

L5 12032 WOVEN (L) FABRIC

=> S THERMOPLASTIC (L) POLYMER

88361 THERMOPLASTIC

23036 THERMOPLASTICS

95374 THERMOPLASTIC

(THERMOPLASTIC OR THERMOPLASTICS)

914623 POLYMER

772653 POLYMERS

1248057 POLYMER

(POLYMER OR POLYMERS)

L6 31575 THERMOPLASTIC (L) POLYMER

=> S INORGANIC (L) MATERIAL

87920 INORGANIC

258 INORGANICS

88138 INORGANIC

(INORGANIC OR INORGANICS)

235618 INORG

960 INORGS

236203 INORG

(INORG OR INORGS)

276244 INORGANIC

(INORGANIC OR INORG)

1202395 MATERIAL

1630534 MATERIALS

2438644 MATERIAL

(MATERIAL OR MATERIALS)

L7 48860 INORGANIC (L) MATERIAL

=> D HIS

(FILE 'HOME' ENTERED AT 15:18:27 ON 09 SEP 2003)

FILE 'CAPLUS' ENTERED AT 15:18:53 ON 09 SEP 2003

L1 7907 S (FIBER OR FIBRE) (L) (MOLDED OR MOULDED) (L) (PART OR ARTICLE)

L2 11136 S POLYAMIDE AND CARBON

L3 4456 S POLYAMIDE (L) CARBON

L4 12923 S WOVEN AND FABRIC

L5 12032 S WOVEN (L) FABRIC

L6 31575 S THERMOPLASTIC (L) POLYMER

L7 48860 S INORGANIC (L) MATERIAL

=> S L1 AND L2 AND L4

L8 6 L1 AND L2 AND L4

=> S L1 AND L4 AND L6 AND L7

L9 0 L1 AND L4 AND L6 AND L7

=> D L8 1-6 BIB,ABS

L8 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2003 ACS on STN

AN 2003:282799 CAPLUS

DN 138:288997

TI Moldable high performance nonwoven, **woven**, and knit forms

IN Stanitis, Gary; Cistone, Frank; Choi, Jin

PA Xtreme Fibers, Inc., USA; Lantor, Inc.

SO PCT Int. Appl., 19 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003029541	A1	20030410	WO 2002-US31255	20020930
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			

PRAI US 2001-326745P P 20011002

AB The invention is related to a web or **fabric** made with high performance **fibers** or filaments having properties such as high melting, chem. resistance, non- burning, strong, non-wetting, high purity. The web also contains **fibers** or filaments with individual deniers between 0.5 and 300 made from melt processable perfluoropolymers. The **fabric** is thermally treated so as to allow the melt processable perfluoropolymer **fibers** (e.g., PTFE **fibers**) and yarns to partially, or fully, melt and adhere to the other **fibers** in the web or **fabric** matrix. The **fabric** or web is capable of being **molded**, drawn, or formed using pressure or vacuum prior to the thermal treatment process, then fixed into place during the thermal treatment process, making a high performance **fabric** or web **article**.

RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2003 ACS on STN

AN 2003:42495 CAPLUS

DN 138:90740

TI **Carbon** fiber-reinforced base materials for composites with high compression strength after impact comprising **fabrics** of **carbon** fiber bundles having specified modulus and breaking energy and having specified polymer content and preforms and composites therefrom

IN Wadahara, Eisuke; Nishimura, Akira; Horibe, Ikuro

PA Toray Industries, Inc., Japan

SO PCT Int. Appl., 59 pp.

CODEN: PIXXD2

DT Patent

LA Japanese

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI WO 2003004758 A1 20030116 WO 2002-JP6696 20020702

W: US

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT,  
LU, MC, NL, PT, SE, SK, TR

JP 2003082117 A2 20030319 JP 2002-126065 20020426

PRAI JP 2001-203263 A 20010704

JP 2002-126065 A 20020426

AB The **carbon fiber**-reinforced base materials (A1) comprise **fabrics** (A) of **carbon fiber** bundles comprising multiple **carbon fiber** filaments and exhibiting tensile modulus .gtoreq.210 GPa and breaking energy .gtoreq.40 MJ/m<sup>3</sup>, and polymers (B) adhered to the **fabrics** with B polymer content 1-20 **parts** per 100 **parts** A **fabric**, or the **carbon fiber**-reinforced base materials comprise A1 base materials exhibiting air permeation rate 10-200 cm<sup>3</sup>/cm<sup>2</sup>-s, or the **carbon fiber**-reinforced base materials having B polymers adhered to the surface of A **fabrics** in the dotted form with diam. of the dots .ltoreq.1 mm, or the **carbon fiber**-reinforced base materials comprise A1 base materials having B polymers existing on the surface of B **fabrics** in the noncontinuous form, or the **carbon fiber**-reinforced base materials comprise A1 base materials having the m.p. or flow initiation temp. of B polymers 50-150.degree., or the **carbon fiber**-reinforced base materials comprise A1 base materials having polymers (C) showing no soly. or flowability at the m.p. or the flow initiation temp. of B polymers adhered to A **fabrics** with C polymer content 1-10 **parts** per 100 **parts** A **fabric**. The preforms (D) comprise laminates of .gtoreq.2 of A1 base material and have the base materials bonded together by B or C polymers. The composites essentially comprise D preforms impregnated with polymers other than B polymers. The composites are useful for primary structures, secondary structures, external materials, interior materials, and **parts** for aircrafts, automobiles, and ships. A **woven fabric** comprising polyacrylonitrile-type **carbon fiber** bundles with no. of filaments 24,000, tensile strength 5830 MPa, modulus 294 GPa, and breaking energy 58 MJ/m<sup>3</sup> as warp yarns and glass **fiber** bundles as auxiliary filling yarns was prepd., coated with a particulate polymer compn. contg. 60% polyether sulfone (Sumikaexcel 50003P) and 40% epoxy resin (AK-601) to form a **fabric** with polymer compn. content 10 **parts** per 100 **parts** **fabric**, heated at 180-200.degree. by IR rays, pressed, cooled, and wound to give a **carbon fiber**-reinforced base material 0.36 mm thick and showing air permeation rate 23.7 cm<sup>3</sup>/cm<sup>2</sup>-s and cover factor 99%. A laminate of the base material was vacuum **molded** in the cavity of a mold for 1 h at mold temp. 80.degree. to give a preform. The preform was impregnated with a compn. contg. Araldite MY-721, Epikote 825, AK-601, Epiclon HP-7200L, Epicure W, 3,3'-diaminodiphenyl sulfone, and Sumicure S and cured 2 h at 180.degree. in a mold to give a composite showing no pin holes and no voids and exhibiting compression strength at normal temp. after impact 248 MPa and compression strength at high temp. after heat-treatment in the wet state 972 MPa.

RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2003 ACS on STN  
AN 2000:10652 CAPLUS  
DN 132:65112  
TI Hydroxy-phenoxy ether polymer fiber-reinforced composites with thermoplastic processability and composite manufacture  
IN Brennan, David J.; White, Jerry E.; Calhoun, Daryl R.  
PA The Dow Chemical Company, USA  
SO U.S., 9 pp.  
CODEN: USXXAM  
DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6011111	A	20000104	US 1993-138300	19931018
PRAI	US 1993-138300		19931018		

AB A thermoplastic composite is prepd. by applying a hydroxy-phenoxyether polymer onto the surface of reinforcing **fibers** or by the in-situ polymn. of mixts. of diepoxides and difunctional species in the presence of reinforcing **fibers**. The composites can be **molded** into shaped **articles** useful for structural materials and **parts** by conventional thermoforming or other fabrication techniques. A composite was prepd. by molding a mixt. of DER 332 and monoethanolamine in the presence of a glass **fiber/carbon fiber woven fabric** to give a thermoformable composite having tensile modulus 2.2 .times. 106 psi.

RE.CNT 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2003 ACS on STN

AN 1999:409494 CAPLUS

DN 131:74583

TI Manufacture of molded **fabric**-reinforced sheet-like friction materials with high tensile strength and abrasion resistance

IN Sato, Yuji; Takase, Kazuhiko

PA Toshiba Tungaloy Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 11173354	A2	19990629	JP 1997-361741	19971210
PRAI	JP 1997-361741		19971210		

AB The friction materials are prepd. by laying pastes (A) contg. friction materials on reinforcing **woven** and/or nonwoven **fabrics** in a mold, molding the comps. by a screen-printing transfer method, and heat-treating the moldings to give friction materials essentially contg. a layer comprising the **fabrics** impregnated with A pastes. The friction materials are useful for brakes, clutches, and sliding **parts** (no data). A paste contg. 60:5:35 (vol. ratio) mixt. of pulp **fibers**, SiO<sub>2</sub>, and phenolic resin was **molded** in a **carbon fiber woven fabric**-covered mold cavity by a screen-printing method and pressed 5 h at 230.degree. and 10 kg/cm<sup>2</sup> to give a ring-shaped disk friction material with av. breaking strength 310 kg/cm<sup>2</sup>.

L8 ANSWER 5 OF 6 CAPLUS COPYRIGHT 2003 ACS on STN

AN 1998:219850 CAPLUS

DN 128:231134

TI Hydroxyphenoxyether polymer thermoplastic composites

IN Brennan, David J.; White, Jerry E.; Calhoun, Daryl R.

PA Dow Chemical Co., USA

SO PCT Int. Appl., 25 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9814498	A1	19980409	WO 1996-US15697	19960930
	W: FI, JP, KR				
	RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
EP	929590	A1	19990721	EP 1996-936089	19960930

EP 929590 B1 20020529  
 R: DE, FR, GB  
 JP 2001501248 T2 20010130 JP 1998-516460 19960930  
 FI 9900448 A 19990302 FI 1999-448 19990302  
 PRAI WO 1996-US15697 W 19960930

AB A thermoplastic composite is prepd. by applying a hydroxy-phenoxyether polymer onto the surface of reinforcing **fibers** or by the in situ polymn. of mixts. of diepoxides and difunctional species in the presence of reinforcing **fibers**. The composites can be **molded** into shaped **articles** useful for structural materials and **parts** by conventional thermoforming or other fabrication techniques. A composite was prepd. by molding a mixt. of DER 332 and monoethanolamine in the presence of a glass **fiber/carbon fiber woven fabric** to give a thermoformable composite.

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 6 OF 6 CAPLUS COPYRIGHT 2003 ACS on STN  
 AN 1986:444359 CAPLUS  
 DN 105:44359  
 TI Laminates  
 IN Cole, Bill W.; Brooks, Gary T.  
 PA Amoco Corp., USA  
 SO U.S., 17 pp.  
 CODEN: USXXAM  
 DT Patent  
 LA English  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 4579773	A	19860401	US 1984-642405	19840820
	JP 61069841	A2	19860410	JP 1985-181581	19850819
	EP 178762	A2	19860423	EP 1985-305924	19850820
	EP 178762	A3	19870624		
	EP 178762	B1	19930113		
	R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
	AT 84557	E	19930115	AT 1985-305924	19850820
PRAI	US 1984-642405		19840820		
	EP 1985-305924		19850820		

AB Heat-resistant continuous **fibers** impregnated with solns. of **polyamide**-polyimides are useful in the manuf.of laminates for the replacement of metals. Thus, stirring 4,4'-oxydianiline 99.6, m-phenylenediamine, N-methylpyrrolidone (I) 604, trimellitic anhydride chloride 142.5, and trimellitic anhydride 6.8 **parts** for 2.5 h at 77-95.degree. F gave **polyamide**-polyimide (II). **Woven SiC fabric** was impregnated with a 30% I soln. of II, and dried 4 days at room temp., 2 h at 250.degree. F, 1 h at 300.degree. F, and 1 h at 400.degree. F to solvent content 1.5%. Four prepregs were **molded** at 660.degree. F, 600.degree. F/500 psig, and 300.degree. F/500 psig to give a laminate with good phys. properties.

=> LOG Y

COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
49.66	49.87

FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE	TOTAL
ENTRY	SESSION
-3.91	-3.91

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